

This question paper contains 4 printed pages]

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S. No. of Question Paper : 8313

Unique Paper Code : 234163

C

Name of the Paper : CSCT 301 : Linux System Administration

Name of the Course : B.Sc. Mathematical Science (Concurrent Course)

Semester : I

Duration : 3 Hours

Maximum Marks : 75

(Write your Roll No. on the top immediately on receipt of this question paper.)

Question No. 1 is compulsory.

Attempt any *Five* questions from Q. No. 2 to Q. No. 8.

1. Give answers to the following questions :

- (i) Which command in Linux is used to test a network connection ? (1)
- (ii) What is *Cal* command ? If no arguments are supplied, what is displayed ? (2)
- (iii) What do you understand by booting ? (2)
- (iv) What is the concept of *plug-and-play* ? (2)
- (v) What are the *three* main features of Linux ? (3)
- (vi) What are the various file systems available in Linux ? (3)

P.T.O.

(vii) What is the ghostscript program ? (3)

(viii) What are the uses of the following commands ? (3)

(a) *chmod*

(b) *passwd*

(ix) Write the full form of the following network services : (3)

(a) DHCP

(b) HTTP

(c) SNMP.

(x) What do you understand by configuring a system ? (3)

2. (a) What is an Operating System ? Explain the different types of Operating Systems with example. (5)

(b) Explain the process of installation of Linux operating system. List *two* popular distributions available in market. (5)

3. (a) What do you understand by Shell? What is the use of an alias in Shell ? Give an example. (5)

(b) Explain with the help of an example that how to send message to other users in Linux environment. Also explain the command which is used to avoid mail disturbance. (5)

4. (a) What is the role of *init process* and *init script* of Linux operating system ? (5)
- (b) What is the need for a rescue disk and how it is created ? (5)
5. Explain the following Linux shell script commands along with examples : (2×5)
- (i) diff
- (ii) grep
- (iii) if...fi
- (iv) tar
- (v) tail
6. What are the outputs of the following given commands ? (2×5)
- (i) ls -l
- (ii) date "+DATE:%"
- (iii) who am i
- (iv) pwd
- (v) chmod 755 <file name>

7. (a) Write a shell script to find the greatest number among the three numbers. (5)
- (b) Write a shell script to check if the number entered at the command line is prime or not. (5)
8. Write short notes on the following : (5×2)
- (a) Multiuser operating system;
- (b) DHCP and FTP.